

NEW GENUS OF SCOLYTIDAE (COLEOPTERA) FROM ASIA

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ABSTRACT.—*Pseudoxylechinus*, new genus, and *uniformis* (type-species) (Yunnan), *variegatus* (Sanxi), *sinensis* (Yunnan), *rugatus* (Yunnan), and *tibetensis* (Tibet), new species, are described. *Kissophagus tiliae* Niisima, 1910, is also transferred to this genus.

In a review of the Scolytidae of China, a genus new to science was found that appears to be a geographical replacement of the closely related North American *Pseudohylesinus* Swaine. Of the seven species examined, all are substantially smaller than are the species of *Pseudohylesinus* and all breed in angiosperm hosts. The species *Kissophagus tiliae* Niisima (1910, Sapporo Nat. Hist. Soc. 3:2), from Japan, is here transferred to *Pseudoxylechinus*.

Pseudoxylechinus, n. g.

DIAGNOSIS.—This genus is distinguished from *Pseudohylesinus* Swaine by the smaller, closer striae punctures, by the unarmed discal interstriae (except in *rugatus*), by the closer, coarser erect discal interstitial setae, by the more slender, apically pointed interstitial ground setae, by the more strongly flattened antennal club with its apex more broadly rounded, and by their occurrence in angiosperm hosts.

DESCRIPTION.—Allied to *Pseudohylesinus* except species mostly smaller, variegated scale patterns less pronounced to absent. Frons sexually dimorphic, more nearly flattened, often with a median carina or groove. Antennal funicle 7-segmented; club flattened, its apex rather broadly rounded. Elytral striae rather narrow, punctures close; interstriae twice as wide as striae usually unarmed on disc. Interstitial ground setae rather slender, each with its apex pointed.

TYPE-SPECIES: *Pseudoxylechinus uniformis* Wood & Huang.

Pseudoxylechinus uniformis, n. sp.

This species is distinguished from other members of the genus by the large size and by

the presence of a median carina on the frons in both sexes.

MALE.—Length 2.6 mm (paratypes 2.5–2.8 mm), 2.2 times as long as wide; color dark brown, vestiture uniformly pale.

Frons convex except moderately impressed on lower two-thirds on median third, impressed area with a fine, long, median carina; surface shining, rather coarsely rugose-punctate laterally and above, smooth, shining, and impunctate near carina; vestiture of rather short, coarse, moderately abundant hair. Eye oval, entire, finely granulate, 3.0 times as long as wide.

Pronotum 0.81 times as long as wide; widest at base, strongly, arcuately converging on basal three-fourths to moderate constriction just behind rather broadly rounded anterior margin; surface smooth, shining, with abundant, minute punctures interspersed with less abundant larger punctures (twice diameter of smaller ones), larger punctures spaced by one to two diameters of a large puncture; small punctures bearing scalelike ground setae, each four times as long as wide, strongly tapered from base to acute point; large punctures each bearing a coarse, slender bristle, each about twice as long as scales.

Elytra 1.5 times as long as wide, 2.1 times as long as pronotum; sides almost straight and parallel on basal two-thirds, rather narrowly, unevenly rounded behind; striae weakly impressed, punctures small, deep, close; interstriae twice as wide as striae, small punctures minute, shallow, obscure, central row of bristle-bearing punctures modestly granulate. Declivity moderately steep, convex; interstriae 1 and 3 moderately convex, 2 impressed

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and narrower than 1 or 3 and without bristles or granules, otherwise sculpture as on disc. Vestiture of rather numerous ground scales, each slightly longer than wide and tapered from its base to acute point; each interstriae with a row of uniseriate, stout bristles, each about three-fourths as long as distance between rows.

FEMALE.—Similar to male except frons more uniformly convex.

TYPE-LOCALITY.—Nanjiang, Sichuan, China.

TYPE-MATERIAL.—The male holotype, female allotype, and a male and three female paratypes were taken at the type locality on 15-VIII-1958, from a broad leaf tree by Song Shi-mei. One female paratype is from Taibai, Shaanxi, China, V-1981, *Pinus tabulaeformis* (accidental?), by Yang Xu-hui.

The holotype, allotype, and two paratypes are in the Institute of Zoology, Academia Sinica, three paratypes are in the Wood collection.

Pseudoxylechinus variegatus, n. sp.

This species is distinguished from *uniformis* Wood & Huang by the smaller size, by the more broadly impressed, grooved, male frons, by the more uniformly punctured pronotum, and by the very different elytra as described below.

MALE.—Frons 2.0 mm (paratypes 1.8–2.1 mm), 2.1 times as long as wide; color dark brown, vestiture 50 to 70 percent pale, remainder darker.

Frons almost flat on slightly more than lower half, upper half of flattened area with a median impression (groove); surface almost smooth, shining on lower half, with fine, shallow punctures; upper areas rugose-reticulate, with obscure, rugose punctures; vestiture of short, rather stout, moderately abundant setae.

Pronotum resembling *uniformis* except sides on basal half subparallel, more strongly arcuate; surface rather coarsely, deeply, uniformly punctured; vestiture of short, stout, moderately abundant bristles, obscurely bicolored.

Elytra about as in *uniformis* except interstitial tubercles higher, sharper; declivity steeper, uniformly convex, interstriae 2 equal in height and convexity to 1 and 3; interstitial

ground setae longer, each about four times as long as wide, each tapered from its base, sharply pointed, bicolored, forming an irregular pattern of pale and darker scales, pale predominate; erect bristles about 1.5 times as long as ground setae, of equal width.

FEMALE.—Similar to male except lower frons more convex, median groove present.

TYPE LOCALITY.—Jiangxian, Shanxi, China.

TYPE MATERIAL.—The male holotype, female allotype, and three male and three female paratypes were taken at the type locality on 5-VIII-1972, from *Elaeagnus* sp., by Huang Fu-sheng.

The holotype, allotype, and two paratypes are in the Zoological Institute, Academia Sinica, and four paratypes are in the Wood collection.

Pseudoxylechinus tibetensis, n. sp.

This species is distinguished from *variegatus* Wood & Huang by the stouter body form, by the less extensively flattened lower frons and shorter groove, and by the larger interstitial tubercles.

FEMALE.—Length 2.2 mm (allotype 2.1 mm), 2.1 times as long as wide; color very dark brown, vestiture forming a variegated pattern of half pale and half dark scales.

Frons irregularly convex, median groove very short; surface rugose-reticulate, obscurely, rather coarsely punctured; vestiture rather short, coarse, moderately abundant.

Pronotum about as in *uniformis*, surface sculpturing similar to *variegatus* except punctures slightly smaller, setae shorter; slender and stout setae clearly discernable.

Elytra about as in *variegatus* except interstitial tubercles on disc distinctly larger, declivital interstriae 1 distinctly higher than 2 or 3, interstitial ground scales shorter, stouter, each less than twice as long as wide, erect interstitial setae more slender. Vestiture about equally divided between pale and dark.

MALE.—Similar to female except frons less extensively flattened on lower half, median groove much shorter than male *variegatus*. Declivity of allotype destroyed (apparently by a predator).

TYPE LOCALITY.—Zayü, Xizang (Tibet).

TYPE MATERIAL.—The female holotype and damaged male allotype were taken at the type locality on 18-IV-1973, 2500 m, from an unidentified host, by Huang Fu-sheng.

The holotype and allotype are in the Zoological Institute, Academia Sinica.

Pseudoxylechinus sinensis, n. sp.

This species is distinguished from *tibetensis* Wood & Huang by the absence of a frontal groove, by the more slender pronotal and elytral ground setae, and by the (apparently) uniformly pale elytral vestiture.

FEMALE.—Length 1.8 mm (paratype 1.9 mm), 2.0 times as long as wide; color dark brown, vestiture apparently uniformly pale (covered by an incrustation).

Frons convex, distinctly inflated just above epistoma, groove absent; surface obscurely subreticulate and rugose-punctate above, more finely sculptured on lower third; vestiture rather fine, short, inconspicuous.

Pronotum about as in *tibetensis* except scale-like setae much more slender. Elytra as in *tibetensis* except interstitial tubercles smaller, declivity more broadly convex with interstriae 1–3 more equally, uniformly convex, scales in ground vestiture much more slender (each about four times as long as wide) but not longer, apparently of uniform color.

TYPE LOCALITY.—Lijiang, Yunnan, China.

TYPE MATERIAL.—The female holotype and one female paratype were taken at the type locality on 2-IX-1962, from an unidentified host by Song Shi-mei.

The holotype is in the Zoological Institute, Academia Sinica, the paratype is in the Wood collection.

Pseudoxylechinus rugatus, n. sp.

This species is distinguished from other members of the genus by the strongly impressed striae, by the large strial punctures, by the coarse interstitial tubercles, and by the very slender interstitial ground setae.

MALE.—Length 2.2 mm (allotype 2.1 mm), 2.0 times as long as wide; color dark brown, vestiture pale.

Frons shallowly concave from epistoma to upper level of eyes from eye to eye; surface largely obscured by an incrustation but apparently with a short median groove, rugose-reticulate, obscure punctures finely rugose.

Pronotum outline about as in *variegatus*, surface shining, punctures coarse, deep, very close, of mixed sizes; vestiture of recumbent, slender, almost hairlike ground setae and erect, rather stout bristles of almost equal length.

Elytra 1.4 times as long as wide, 1.1 times as long as pronotum; sides almost straight and parallel on basal two-thirds, broadly rounded behind; striae rather strongly impressed, punctures coarse, deep, close; interstriae as wide as striae, each armed by a uniseriate row of closely set, coarse, almost subvulcanate, setiferous tubercles, each tubercle almost as high as wide and almost as wide as interstriae. Declivity steep, convex; punctures and tubercles distinctly smaller than on disc. Vestiture limited to a row of ground setae on each side of each interstriae, each seta slender (about eight times as long as wide), and erect bristles, one arising from each tubercle, each bristle only slightly longer and stouter than ground setae.

FEMALE.—Similar to male except frons convex, modestly inflated just above flattened epistomal area.

TYPE LOCALITY.—Xishuangbanna, Yunnan, China.

TYPE MATERIAL.—The male holotype and female allotype were taken 7-V-1962, 750 m, from *Cassia* sp., by Song Shi-mei.

The holotype and allotype are in the Zoological Institute, Academia Sinica.